Using Brightspace statistics for program assessment

During the annual program assessment cycle, faculty identify key "artifacts" within their programs and then collect and analyze student achievement data for those artifacts. In Brightspace, the Quiz Statistics area and the Rubric Statistics area (for Assignments but also for general Gradebook items) provide a class performance overview. From there, you can drill down into individual quiz questions and rubric components to identify patterns of strength and weakness in student performance.

Brightspace statistics can help you examine class performance patterns to:
- identify where, within key assessments, your students are generally achieving on target
- identify where students are struggling and missing the target
- make corrections to the assessment instrument (poorly worded questions, instructions, etc.)
- evaluate whether there is alignment between assessment artifacts and the outcomes they should reflect (Is this exam/project/paper actually measuring this outcome? Is the outcome itself appropriate and well-articulated?)
- evaluate whether there is alignment between assessments and course/program activities (Are course activities really preparing students for the key assessments? Should there be a change in pacing, activities, textbook, lab facilities?)
- make changes to the program curriculum (adding/removing courses, prerequisites, etc.)
- determine whether your current Assessment Plan is leading you to meaningful analysis

First: what is an artifact?[1]

Program assessment will typically rely on the evaluation of a few key assessment "artifacts" in the program's upper-level courses. Some examples of "direct-evidence" artifacts include:

Comprehensive (summative) exams measure the extent to which students have synthesized the knowledge and skills they were expected to acquire during their program. Effective comprehensive exams typically require written responses to questions, but these exams may also include multiple choice, matching, and true/false. Standardized industry or licensure exams may be applicable in certain fields.

Capstone projects are generally designed for students in the last semester before completing a program. They give students the opportunity to integrate the knowledge and skills they are expected to have acquired during the program. The capstone might include a single final assessment (e.g., final project, performance, paper) or a series of related assessments (e.g., a research project broken into multiple phases).

Performance assessments require students to perform a task or complete a project that is as representative as possible of the kind of real-world tasks or projects they will be expected to perform in their field. For example, students whose field will require the ability to repair an automobile transmission should be evaluated on their performance repairing an actual automobile transmission.

Portfolios are collections of student work that challenge students to provide evidence of their achievement and to reflect upon their learning and growth through their program. A portfolio may contain all or some of the following: research papers, process reports, exams, case studies, audio, video, personal essays, journals, self-evaluations.

Written assignments require students to demonstrate learning by articulating responses to questions, prompts, etc. Examples include proposals, research papers, scientific reports, reflective essays, expository essays, position papers, literary analysis, and creative pieces.

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[1] Adapted from Waubonsee Community College Learning Outcomes, Curriculum, and Program Development
https://facultydae.waubonsee.edu/sites/default/files/docs/2021-06/What%20is%20an%20Assessment%20Artifact%20and%20%20Measure.pdf

Note: Direct Assessment refers to any method of collecting data that requires students to demonstrate a knowledge, skill, or behavior. Indirect Assessment refers to any method of collecting data that requires reflection on student learning, skills, or behaviors, rather than a demonstration of it.

Quiz Statistics in Brightspace

While the Quiz is often used for formative assessments, summative (comprehensive) assessments are possible as well. Keep in mind that quizzes can include short and long answer as well as multiple choice and T/F questions, and that statistics are available for all formats (though in a more limited way when questions are open ended).

Rubric Statistics in Brightspace

Rubrics in Brightspace allow instructors to provide feedback to students while also collecting detailed assessment data. The Rubric tool is one of your best resources for organizing program assessment data! It allows you to develop key criteria for assignments and indicate the level at which a student performed within each criterion. Like the Quiz statistics area, the Rubric statistics area allows you to gather an aggregated overview of class performance.

Note: Rubrics are typically used with the Assignment tool but you can attach a Rubric to any grade item (e.g., an in-class assignment grade).